

REMARKS

This Amendment is made in response to the Final Action mailed February 23, 2009. Claims 9, 20, 21, 24 and 25 have been cancelled without prejudice to their further prosecution in one or more continuation or divisional applications. Claims 1, 10-19 and 23 have been amended. New claim 26 has been added. Accordingly, claims 1-8, 10-19, 22, 23 and 26 are presented for examination in this application. Applicants believe these amendments place this application into condition for allowance, or into better condition for appeal. Reconsideration and withdrawal of the objections to, and rejections of, this application are respectfully requested in view of the above amendments, and further, in view of the following remarks.

Preliminarily, Applicants note that claim 1 has been amended in order to clarify that the charging unit comprises means to apply a charging voltage V1 to the capacitor when the toothbrush is connected to the unit, and means operable by a user of the toothbrush to temporarily apply a charging voltage V2 higher than V1 to the capacitor after application of charging voltage V1 and prior to use of the toothbrush the temporary application of a higher voltage V2, higher than the charging voltage V1. The advantage of this is taught in the instant specification at page 5, lines 10-22, that by doing so it is possible to get the supercapacitor to deliver more than its normal rated power output, but without the damage that might occur if the supercapacitor is permanently connected to voltage V2.

Applicants have added a new claim 26 covering an embodiment wherein the power supply in the charging unit is a replaceable or rechargeable battery, paralleling claim 17 in which boost voltage V2 may be provided by a main powered unit. Support for this claim can be found in the claims and specification as originally filed. No new matter has been added by addition of this new claim.

Claims 1-16, 20 and 22-25 have been rejected under 35 U.S.C. §103(a), as obvious over U.S. Patent 5,561,881, granted October 8, 1996, to Klinger et al. ("Klinger") in view of U.S. Patent 6,437,544, granted August 20, 2002, to Yang ("Yang"). Reconsideration and withdrawal of the rejection are respectfully requested.

Klinger discloses an electric toothbrush 100 containing a battery 110, which is connectable to a charger unit 200 via connector 160. This arrangement is conventional for power toothbrushes. Yang discloses a power unit in which electricity for emergency use is stored in a storage means 105 which may be a secondary battery or

supercapacitor. The Action alleges that it is obvious from Yang to replace the battery of Klinger with a supercapacitor.

Amended claim 1 clarifies that the invention is directed to an electrically powered toothbrush in combination with a charging unit which incorporates an electricity supply which can deliver a lower charging voltage V1, and a temporary higher charging voltage V2, prior to use of the toothbrush. This is neither taught nor suggested in either Klinger or Yang, or any fair combination of the two documents. In Klinger other than its intelligent infrared receiver and indicator, the charging unit appears to be an entirely conventional charger designed to deliver a steady sustained voltage. In Yang the disclosed power supply 101 is connectable to a power supply 100 but there is no disclosure of the possibility of any "boost" voltage. In fact, since the power supply of Yang is described as an emergency power supply, one of skill in the art would conclude that it is intended for use in situations where no electricity supply is available to provide a boost voltage as now claimed in present amended claim 1.

Therefore amended claim 1, and the claims dependent therefrom, is not obvious over Klinger in view of Yang. Reconsideration and withdrawal of this rejection are respectfully requested.

Claims 17-19 have been rejected under 35 U.S.C. §103(a), as obvious over Klinger in view of Yang as applied to claim 1, and further in view of U.S. Patent 6,140,802, granted October 31, 2000, to Lundell et al. ("Lundell"). The Action admits that Klinger and Yang do not disclose systems in which the charging voltage is increased from V1 to V2, but that this is obvious over Lundell's disclosure of step 106 of Fig. 5, wherein the system is timed out if the toothbrush is not used. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 17-19 relate to the provision of V1 and the boost voltage V2 from the mains supply. The Action refers to Fig. 5, the relevant description of which is found at col. 3, lines 30-53, and alleges that this discloses a charging unit constructed to derive charging and boost voltages to V1 and V2 from the supply. The Action alleges Lundell discloses different levels to which the voltage is increased which may be V1 and V2, a time-out system.

Lundell generally, and the description at col. 3, lines 30-53, have no relevance to the present invention as claimed in amended claim 1. Lundell relates to a toothbrush which is directed to overcoming the problem of initial high vibration, and previous attempts to solve this by an adjustable power control to the motor, or a mechanical governor system (see, col. 1, lines 24-50). The solution provided by Lundell is a toothbrush provided with an automatic power control system which initially starts the

motor at low power from the power source battery and gradually builds up to higher power (see, col 1, lines 55-64), or which conserves battery power by initially delivering less than full power until the battery has partly run down so as to maintain an optimum value when the battery voltage decreases below a first level, so as to maintain normal operation of the device (see, col. 1, lines 65- 67 through col. 2, lines 1-10). The disclosure at col. 3, lines 55-64, describes a specific form of control in which power from the battery to the motor is gradually increased by the microcontroller 38 from an initial 47% through four power levels up to 100%.

This clearly has nothing whatsoever to with the present invention which relates to the way in which charging power is provided to the power source, being a capacitor, providing a temporary high voltage boost voltage V2 just before use. The advantage, not disclosed or suggested by Lundell, is that power output can be safely increased while minimising damage to the capacitor. In Lundell the only description of the charging unit 28, at col. 2, lines 44-45, discloses no detail whatever to suggest that it is anything other than entirely conventional.

Therefore Lundell, in any fair combination with Klinger and Yang, does not make amended claim 1, or present claims 17-19 obvious. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim 21 has been rejected under 35 U.S.C. §103(a), as obvious over Klinger in view of Yang as applied to claim 21, and further in view of U.S. Patent 5,727,273, granted March 17, 1998, to Pai ("Pai"). Claim 21 has been cancelled without prejudice. Therefore, the rejection is moot and should be withdrawn.

In view of the foregoing, favorable consideration of claims 1-19, 22-23 and 26, are respectfully requested and allowance of this application are earnestly solicited.

Respectfully submitted,



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